Gastric Outlet Obstruction in an infant

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January 20, 2010
History

- 14 mo male with intermittent nonbilious, nonprojectile, nonbloody vomiting, ~30min-2hrs s/p feeding, 3 lb wt loss in 2 mo, no ↓ appetite, ↓ stool & wet diapers

- PMH: BW 6lbs 7oz, NICU stay x2mo 2º withdrawal Sx; 4day stay for RSV @6mo

- FHx: maternal drug addiction

- SocHx: FT, NSVD, older sister, immunizations
Physical Examination

- VS 98º 125/83 149 24
- Wt 20.2lbs (3-10%) Ht 27.5in (<3%)
- Gen: irritable, non-consolable, eager to eat/drink
- HEENT: NCAT, MM dry
- Cv: nl S1 S2, RRR, no m/r/g
- Chest: CTAB/L
- Abd: soft, NT, ND, no mass, +BS
- Skin: warm, dry, good turgor, good cap refill
Gastric Outlet Obstruction

Laboratory work-up

UA – neg
Gastric Outlet Obstruction

Impression – Highly Suspicious for Pyloric Stenosis
Initial Management & Endoscopy

- Resuscitation
  - D5 ¼ NS +20mEq KCl @80
- NGT placement
- GI Consult
- Peds Surgery Consult
Gastric Outlet Obstruction

Upper GI Series
Surgical Exploration

Gastric Outlet Obstruction
Operative Management/ Recovery

- Transverse upper abdominal incision
- Gastrostomy – web resection
- 14Fr Bougie fit

POST-OP recovery
- Await BM
- Advance diet
- D/C Home POD#4
Pyloro-antral Web
Etiology

- Maternal intrauterine vascular accidents
  - Ischemic necrosis
  - Subsequent bowel atresia
- Failure of recanalization
- Redundancy and slipping of epithelial lining
- Genetics
- Pyloroduodenal obstruction
Clinical Presentation

- Maternal Hx of polyhydramnios
- Nonbilious vomiting
  - Gastric outlet obstruction
- Respiratory Sx
  - Dyspnea
  - Tachypnea
  - Cyanosis
  - Excessive salivation
- Epigastric fullness
- Perforation
Abdominal Radiography

Pyloro-antral Web
FIG. 4.28. Mucosal prolapse. The prolapsed mucosa assumes a mushroom-shaped configuration overlying the area of the pylorus.
"It was a difficult operation but in the end, I won."
Treatment of Pyloric Atresia

- Gastrostomy
- Distal passage of a catheter
  - Detect membranous obstructions
- Excision of complete or partial diaphragm
  - Heineke-Mikulicz or Finney Pyloroplasty
  - Gastroduodenostomy
- Alternative procedures using endoscopy
  - Balloon dilatation
  - Laser web excision
  - Laser radial incisions of membrane
References


